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A New Ecosystem for Biodiversity Data: An Open Source Repository for Born Digital Scientific Collections

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#2402_Imago



AT THE HELM
LEADING TRANSFORMATION
MARCH 22-25, 2017
Baltimore, Maryland

University of Wyoming Biodiversity Collections

Wyoming Use Cases

- UW Museum of Vertebrates: ~9,000 specimens
- UW Geological Museum: ~40,000 fossil specimens
- Rocky Mountain Herbarium: ~850,000 specimens



University of Wyoming Museum of Vertebrates

Collection Management Systems

- Arctos (<http://arctosdb.org>)
- Specify (<http://specifyx.specifysoftware.org>)
- Symbiota (<http://symbiota.org>)



Symbiota

*Promoting
Bio-Collaboration*

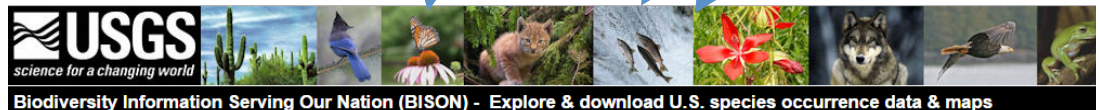
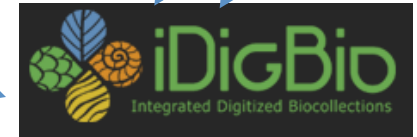


IU Imago Use Case

Journey: Metadata + Digital Images



Imago



- Global Biodiversity Information Facility (GBIF, <http://www.gbif.org/>)
- Integrated Digitized Biocollections (iDigBio, <https://www.idigbio.org/>)

Digital Biodiversity Preservation Shortcomings

In all cases

- Neither content management systems, nor aggregation services provide preservation means
- Master images are not preserved in context with metadata
- No agreed upon standards for file preservation, file format, technical metadata, etc.

Introducing Imago (imago.indiana.edu)

2016

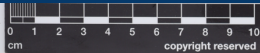
- Repository for physical specimen biocollections
- Objects
 - Digital Library Preservation Repository 2-D & 3-D images
- Metadata

2017

- Available on a VM in Jetstream
- Import/Export functions to facilitate workflows with NSF supported Specify and Symbiota
- <http://imago.indiana.edu>

The screenshot displays the Imago website, an Indiana University project. The header features the Indiana University logo and the word 'Imago'. Navigation links for 'Home', 'About', and 'Help' are present. A search bar with the placeholder 'Enter search terms' and a 'Go' button is located in the top right. Below the header, a 'Limit your search' sidebar on the left lists various taxonomic levels: Collection, Kingdom, Phylum or Division, Class, Order, Family, Genus, Scientific Name, and Country, each with a right-pointing arrow. The main content area shows search results for 'IND-0080286' and 'IND-0080285'. For each result, there is a thumbnail image (a blue cube for the first, a plant specimen for the second) and a table of metadata. The metadata for both results includes an 'Identifier' (a PURL) and a 'Scientific Name' (*Zanthoxylum americanum*). Pagination controls at the top of the results area show '« Previous | 1 - 10 of 63,154 | Next »'. Sorting and display options (Sort by relevance, 10 per page, and view icons) are also visible.

Imago Specimens (70K + growing)



IND



IND-0010840 [Open Access](#)

Descriptions

Attribute Name	Values
Identifier	http://purl.dlib.indiana.edu/iudl/herbarium/IND-0010840
Rights	Attribution-NonCommercial 3.0 United States
Collection code	herbarium
Catalog number	IND-0010840
Country	United States
State province	Indiana
County	Shelby
Kingdom	Plantae
Phylum	Magnoliophyta
Order	Liliales
Family	Melanthiaceae
Genus	Trillium
Specific epithet	recurvatum
Scientific name	Trillium recurvatum
Scientific name authorship	Beck
Basis of record	PreservedSpecimen

Last modified:



[Download the full-sized image](#)



Citations:

[EndNote](#) | [Zotero](#) | [Mendeley](#)



Imago Facets for Biocollections

Limit your search

Collection >

Kingdom >

Phylum or Division >

Class >

Order >

Family >

Genus >

Scientific Name >

Country >

County >

Collection >

Kingdom ▼

Plantae

63,082

Phylum or Division ▼

Magnoliophyta

57,217

Pteridophyta

4,238

Coniferophyta

618

Lycopodiophyta

554

Equisetophyta

371

more Phylum or Divisions»

Class >

Order >

Family >

Genus >

Scientific Name >

Country >

IMAGO Partnership



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OF WYOMING

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National



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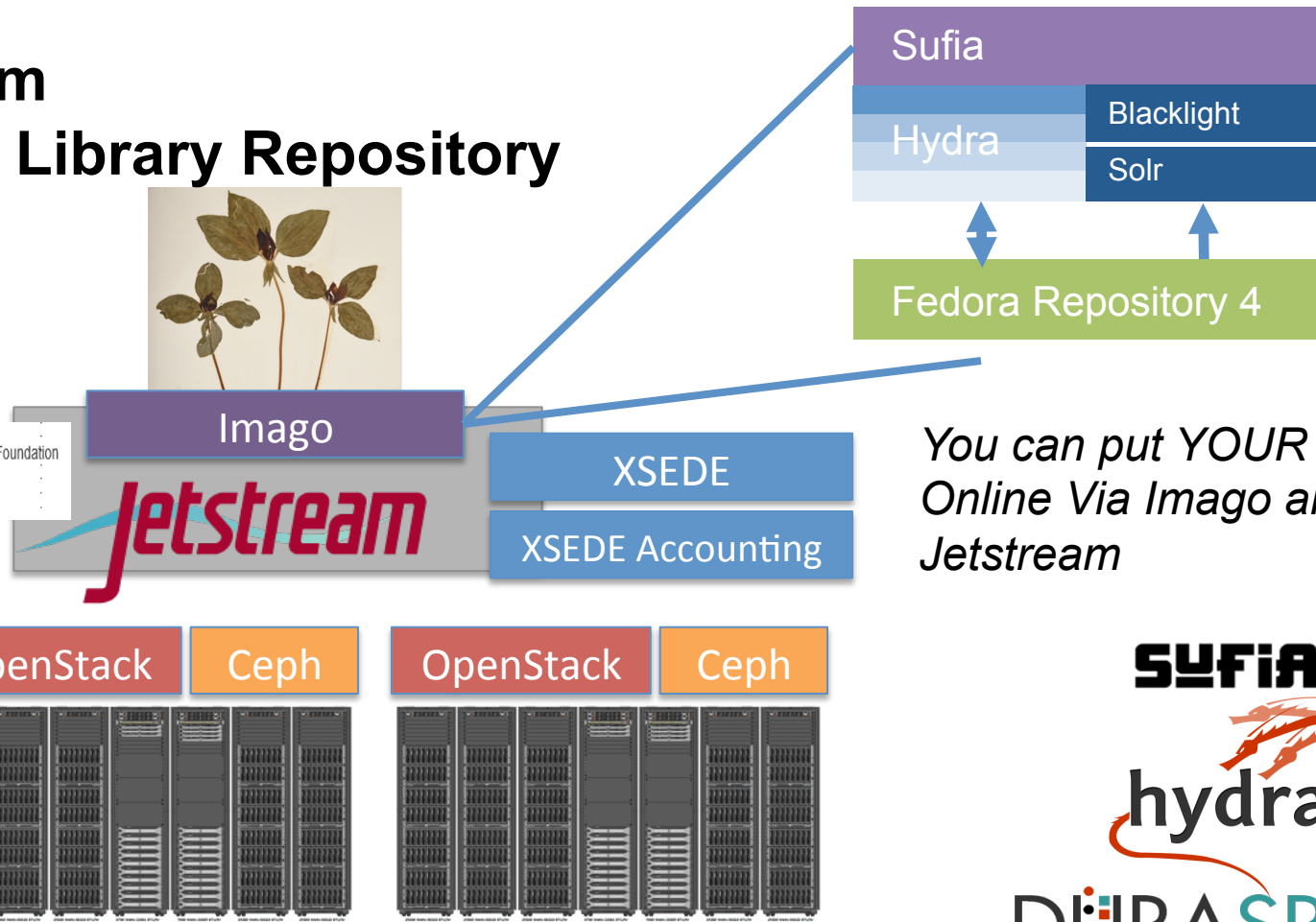
Baltimore, Maryland

Imago + Jetstream

Imago

Jetstream

+ Digital Library Repository



*You can put YOUR collection
Online Via Imago and
Jetstream*



DURASPACE™

Thank You

IU Libraries

- Jen Laherty, Product Owner
- Sabrina Goodpaster, Scrum Master
- Jim Halliday, Sr. Developer
- Will Cowan, Head Software Development
- Jon Dunn, Associate Dean for Library Technologies

IU CBRC/Herbarium

- Eric Knox, Head IU Herbarium
- Walter Fertig, Curator IU Herbarium
- Gary Motz, CBRC Project Coordinator

IU UITS/Jetstream

- Craig Stewart, Co-PI Jetstream
- Thomas Doak, Manager, NCGAS
- Jeremy Fisher, Sr. Tech Advisor Jetstream

U Wyoming Libraries

- Chad Hutchens, Head Digital Collections
- Larry Schmidt, Geology Library
- Ed Fugikawa, Islandora Developer

Jetstream Partners



INDIANA UNIVERSITY
PERVASIVE TECHNOLOGY INSTITUTE



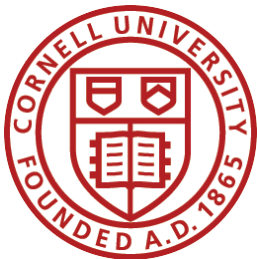
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Contact Information

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- For more on University of Wyoming Digital Collections
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